

AMENDED IN SENATE MARCH 12, 2015

SENATE BILL

No. 180

Introduced by Senator Jackson

February 9, 2015

An act to add Section 25544 to the Public Resources Code, and to amend the heading of Chapter 3 (commencing with Section 8340) of Division 4.1 of, and to amend, repeal, and add Sections 8340 and 8341 of, the Public Utilities Code, relating to electricity.

LEGISLATIVE COUNSEL'S DIGEST

SB 180, as amended, Jackson. Electricity: emissions of greenhouse gases.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations while local publicly owned electric utilities are under the direction of their governing board. Existing law prohibits any load-serving entity and any local publicly owned electric utility from entering into a long-term financial commitment for baseload generation unless that baseload generation complies with a greenhouse gases emission performance standard. Existing law requires the Public Utilities Commission, by February 1, 2007, through a rulemaking proceeding and in consultation with the State Energy Resources Conservation and Development Commission and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all baseload generation of load-serving entities. Existing law requires the State Energy Resources Conservation and Development Commission, by June 30, 2007, at a duly noticed public hearing and in consultation with the Public Utilities Commission and the State Air Resources Board, to

establish a greenhouse gases emission performance standard for all baseload generation of local publicly owned electric utilities.

This bill would, on July 1, 2017, replace the greenhouse gases *emission* performance ~~emission~~ standards for baseload generation with greenhouse gases *emission* performance ~~emission~~ standards for ~~primary nonpeaking~~ generation and ~~secondary peaking~~ generation, as defined. The bill would require the Public Utilities Commission, by June 30, 2017, through a rulemaking proceeding and in consultation with the State Energy Resources Conservation and Development Commission and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all ~~primary nonpeaking~~ generation of load-serving entities, and a separate standard for ~~secondary peaking~~ generation. The bill would require the State Energy Resources Conservation and Development Commission, by June 30, 2017, at a duly noticed public hearing and in consultation with the Public Utilities Commission and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all ~~primary nonpeaking~~ generation of local publicly owned electric utilities, and a separate standard for ~~secondary peaking~~ generation. The bill would require that the greenhouse gases emission performance standard for ~~primary nonpeaking~~ generation and ~~secondary peaking~~ generation be established at the lowest level that the ~~2~~ *respective* commissions determine to be technologically feasible without putting reliability of the electrical grid and of electric service at risk. *The bill would require that the commissions update their respective greenhouse gases emission performance standards every 5 years based on new technology.* The bill would require that the ~~initial~~ greenhouse gases emission performance standard for ~~primary nonpeaking~~ generation *that will take effect on July 1, 2027*, establish a rate of emissions of greenhouse gases that is 80% lower than the permissible rate of emissions of greenhouse gases for baseload generation in effect as of January 1, 2015. ~~The bill would require that the commissions update their respective greenhouse gases emission performance standards every 5 years based on new technology.~~

Existing law makes any public utility that fails to comply with any part of any order, decision, rule, direction, demand, or requirement of the commission guilty of a crime. Existing law additionally makes every corporation or person other than a public utility who fails to comply with any part of any order, decision, rule, direction, demand, or requirement of the commission guilty of a crime.

Because this bill would require action by the Public Utilities Commission to implement its requirements with respect to a load-serving entity, and a violation of an order or decision of the Public Utilities Commission would be a crime, the bill would impose a state-mandated local program by expanding what is a crime.

The Warren-Alquist State Energy Resources Conservation and Development Act establishes the State Energy Resources Conservation and Development Commission and requires it to certify sufficient sites and related facilities that are required to provide a supply of electricity sufficient to accommodate projected demand for power statewide. The act grants the ~~State Energy Resources Conservation and Development Commission~~ *commission* the exclusive authority to certify any stationary or floating electrical generating facility using any source of thermal energy, with a generating capacity of 50 megawatts or more, and any facilities appurtenant thereto.

The California Environmental Quality Act (*CEQA*) generally requires all state and local governmental lead agencies to prepare, or cause to be prepared by contract, and certify the completion of, an environmental impact report on any discretionary project that they propose to carry out or approve that may result in a significant effect on the environment, that is, a substantial, or potentially substantial, adverse change in the physical conditions that exist within the area that will be affected by the project. ~~The “lead agency” for a project is the public agency that has the principal responsibility for carrying out or approving the project that may have a significant effect on the environment.~~ *CEQA authorizes the plan or other written documentation containing environmental information of state agencies to be submitted in lieu of an otherwise required environmental impact report if the Secretary of the Natural Resources Agency has certified the regulatory program in a specified manner.*

~~This bill would designate the State Energy Resources Conservation and Development Commission to be the lead agency with respect to provide that any carbon capture and storage project associated with an application for certification.~~ *certification is a related facility for purposes of the certification of a thermal powerplant by the State Energy Resources Conservation and Development Commission and for purposes of the secretary’s authority with respect to a certified regulatory program.*

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.

State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. Section 25544 is added to the Public Resources
2 Code, to read:

3 25544. ~~The commission shall be the lead agency, as defined~~
4 ~~in Section 21067, for any~~ Any carbon capture and storage project
5 associated with an application for certification *is a related facility*
6 pursuant to this chapter *and for purposes of Section 21080.5*. For
7 purposes of this section, “carbon capture and storage,” also known
8 as carbon capture and sequestration, means *any method authorized*
9 *by the commission for preventing the release of greenhouse gases*
10 *into the atmosphere, including the injection of carbon dioxide or*
11 *other greenhouse gases into geological formations so as to prevent*
12 *releases into the atmosphere.*

13 SEC. 2. The heading of Chapter 3 (commencing with Section
14 8340) of Division 4.1 of the Public Utilities Code is amended to
15 read:

16
17 CHAPTER 3. GREENHOUSE GASES EMISSION PERFORMANCE
18 STANDARD
19

20 SEC. 3. Section 8340 of the Public Utilities Code is amended
21 to read:

22 8340. For purposes of this chapter, the following terms have
23 the following meanings:

24 (a) “Baseload generation” means electricity generation from a
25 powerplant that is designed and intended to provide electricity at
26 an annualized plant capacity factor of at least 60 percent.

27 (b) “Combined-cycle natural gas” with respect to a powerplant
28 means the powerplant employs a combination of one or more gas
29 turbines and steam turbines in which electricity is produced in the

1 steam turbine from otherwise lost waste heat exiting from one or
2 more of the gas turbines.

3 (c) “Electric service provider” means an “electric service
4 provider” as defined in Section 218.3, but does not include
5 corporations or persons employing cogeneration technology or
6 producing electricity from other than a conventional power source
7 consistent with subdivision (b) of Section 218.

8 (d) “Greenhouse gases” means those gases listed in Section
9 38505 of the Health and Safety Code.

10 (e) “Load-serving entity” means every electrical corporation,
11 electric service provider, or community choice aggregator serving
12 end-use customers in the state.

13 (f) “Long-term financial commitment” means either a new
14 ownership investment in baseload generation or a new or renewed
15 contract with a term of five or more years, which includes
16 procurement of baseload generation.

17 (g) “Output-based methodology” means a greenhouse gases
18 emission performance standard that is expressed in pounds of
19 greenhouse gases emitted per megawatthour and factoring in the
20 useful thermal energy employed for purposes other than the
21 generation of electricity.

22 (h) “Plant capacity factor” means the ratio of the electricity
23 produced during a given time period, measured in kilowatthours,
24 to the electricity the unit could have produced if it had been
25 operated at its rated capacity during that period, expressed in
26 kilowatthours.

27 (i) “Powerplant” means a facility for the generation of electricity,
28 and includes one or more generating units at the same location.

29 (j) “Zero- or low-carbon generating resource” means an
30 electrical generating resource that will generate electricity while
31 producing emissions of greenhouse gases at a rate substantially
32 below the greenhouse gases emission performance standard, as
33 determined by the commission.

34 (k) This section shall become inoperative on July 1, 2017, and,
35 as of January 1, 2018, is repealed.

36 SEC. 4. Section 8340 is added to the Public Utilities Code, to
37 read:

38 8340. For purposes of this chapter, the following terms have
39 the following meanings:

(a) “Electric service provider” has the same meaning as defined in Section 218.3, but does not include corporations or persons employing cogeneration technology or producing electricity from other than a conventional power source consistent with subdivision (b) of Section 218.

(b) “Exempt generation” means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of less than 2 percent.

(c) “Greenhouse gases” means those gases listed in Section 38505 of the Health and Safety Code.

(d) “Greenhouse gases—~~performance—emissions~~ *emission performance* standard” means the permissible levels of emissions of greenhouse gases established pursuant to Section 8341 for ~~primary nonpeaking~~ generation and ~~secondary peaking~~ generation.

(e) “Load-serving entity” means every electrical corporation, electric service provider, or community choice aggregator serving end-use customers in the state.

(f) “Long-term financial commitment” means either a new ownership investment in ~~primary nonpeaking~~ generation or ~~secondary peaking~~ generation or a new or renewed contract with a term of five or more years, which includes procurement of ~~primary nonpeaking~~ generation or ~~secondary peaking~~ generation.

(g) “Nonpeaking generation” means *electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 15 percent.* “Nonpeaking powerplant” means *a powerplant that provides nonpeaking generation.*

~~(g)~~

(h) “Output-based methodology” means a greenhouse gases emission performance standard that is expressed in pounds of greenhouse gases emitted per megawatthour and factoring in the useful thermal energy employed for purposes other than the generation of electricity.

(i) “Peaking generation” means *electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of less than 15 percent and at least 2 percent.* “Peaking powerplant” means *a powerplant that provides peaking generation.*

~~(h)~~

1 (j) “Plant capacity factor” means the ratio of the electricity
2 produced during a given time period, measured in kilowatthours,
3 to the electricity the unit could have produced if it had been
4 operated at its rated capacity during that period, expressed in
5 kilowatthours.

6 (i)

7 (k) “Powerplant” means a facility for the generation of
8 electricity, and includes one or more generating units at the same
9 location.

10 ~~(j) “Primary generation” means electricity generation from a~~
11 ~~powerplant that is designed and intended to provide electricity at~~
12 ~~an annualized plant capacity factor of at least 15 percent.~~

13 ~~(k) “Secondary generation” means electricity generation from~~
14 ~~a powerplant that is designed and intended to provide electricity~~
15 ~~at an annualized plant capacity factor of less than 15 percent and~~
16 ~~at least 2 percent.~~

17 (l) “Zero- or low-carbon generating resource” means an
18 electrical generating resource that will generate electricity while
19 producing emissions of greenhouse gases at a rate substantially
20 below the greenhouse gases emission performance standard, as
21 determined by the commission.

22 (m) This section shall become operative on January 1, 2017.

23 SEC. 5. Section 8341 of the Public Utilities Code is amended
24 to read:

25 8341. (a) No load-serving entity or local publicly owned
26 electric utility may enter into a long-term financial commitment
27 unless any baseload generation supplied under the long-term
28 financial commitment complies with the greenhouse gases emission
29 performance standard established by the commission, pursuant to
30 subdivision (d), for a load-serving entity, or by the Energy
31 Commission, pursuant to subdivision (e), for a local publicly owned
32 electric utility.

33 (b) (1) The commission shall not approve a long-term financial
34 commitment by an electrical corporation unless any baseload
35 generation supplied under the long-term financial commitment
36 complies with the greenhouse gases emission performance standard
37 established by the commission pursuant to subdivision (d).

38 (2) The commission may, in order to enforce this section, review
39 any long-term financial commitment proposed to be entered into
40 by an electric service provider or a community choice aggregator.

1 (3) The commission shall adopt rules to enforce the requirements
2 of this section, for load-serving entities. The commission shall
3 adopt procedures, for all load-serving entities, to verify the
4 emissions of greenhouse gases from any baseload generation
5 supplied under a contract subject to the greenhouse gases emission
6 performance standard to ensure compliance with the standard.

7 (4) In determining whether a long-term financial commitment
8 is for baseload generation, the commission shall consider the design
9 of the powerplant and the intended use of the powerplant, as
10 determined by the commission based upon the electricity purchase
11 contract, any certification received from the Energy Commission,
12 any other permit or certificate necessary for the operation of the
13 powerplant, including a certificate of public convenience and
14 necessity, any procurement approval decision for the load-serving
15 entity, and any other matter the commission determines is relevant
16 under the circumstances.

17 (5) Costs incurred by an electrical corporation to comply with
18 this section, including those costs incurred for electricity purchase
19 agreements that are approved by the commission that comply with
20 the greenhouse gases emission performance standard, are to be
21 treated as procurement costs incurred pursuant to an approved
22 procurement plan and the commission shall ensure timely cost
23 recovery of those costs pursuant to paragraph (3) of subdivision
24 (d) of Section 454.5.

25 (6) A long-term financial commitment entered into through a
26 contract approved by the commission, for electricity generated by
27 a zero- or low-carbon generating resource that is contracted for,
28 on behalf of consumers of this state on a cost-of-service basis,
29 shall be recoverable in rates, in a manner determined by the
30 commission consistent with Section 380. The commission may,
31 after a hearing, approve an increase from one-half to 1 percent in
32 the return on investment by the third party entering into the contract
33 with an electrical corporation with respect to investment in zero-
34 or low-carbon generation resources authorized pursuant to this
35 subdivision.

36 (c) (1) The Energy Commission shall adopt regulations for the
37 enforcement of this chapter with respect to a local publicly owned
38 electric utility.

39 (2) The Energy Commission may, in order to ensure compliance
40 with the greenhouse gases emission performance standard by local

publicly owned electric utilities, apply the procedures adopted by the commission to verify the emissions of greenhouse gases from baseload generation pursuant to subdivision (b).

(3) In determining whether a long-term financial commitment is for baseload generation, the Energy Commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the Energy Commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit for the operation of the powerplant, any procurement approval decision for the load-serving entity, and any other matter the Energy Commission determines is relevant under the circumstances.

(d) (1) On or before February 1, 2007, the commission, through a rulemaking proceeding, and in consultation with the Energy Commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all baseload generation of load-serving entities, at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation. Enforcement of the greenhouse gases emission performance standard shall begin immediately upon the establishment of the standard. All combined-cycle natural gas powerplants that are in operation, or that have an Energy Commission final permit decision to operate as of June 30, 2007, shall be deemed to be in compliance with the greenhouse gases emission performance standard.

(2) In determining the rate of emissions of greenhouse gases for baseload generation, the commission shall include the net emissions resulting from the production of electricity by the baseload generation.

(3) The commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electrical and thermal energy.

(4) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source.

(5) Carbon dioxide that is injected in geological formations, so as to prevent releases into the atmosphere, in compliance with applicable laws and regulations shall not be counted as emissions of the powerplant in determining compliance with the greenhouse gases emissions performance standard.

(6) In adopting and implementing the greenhouse gases emission performance standard, the commission, in consultation with the Independent System Operator shall consider the effects of the standard on system reliability and overall costs to electricity customers.

(7) In developing and implementing the greenhouse gases emission performance standard, the commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.

(8) In developing and implementing the greenhouse gases emission performance standard, the commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.

(9) An electrical corporation that provides electric service to 75,000 or fewer retail end-use customers in California may file with the commission a proposal for alternative compliance with this section, which the commission may accept upon a showing by the electrical corporation of both of the following:

(A) A majority of the electrical corporation's retail end-use customers for electric service are located outside of California.

(B) The emissions of greenhouse gases to generate electricity for the retail end-use customers of the electrical corporation are subject to a review by the utility regulatory commission of at least one other state in which the electrical corporation provides regulated retail electric service.

(e) (1) On or before June 30, 2007, the Energy Commission, at a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all baseload generation of local publicly owned electric utilities at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation. The greenhouse gases emission performance standard established by the Energy Commission for local publicly owned electric utilities shall be consistent with the standard adopted

1 by the commission for load-serving entities. Enforcement of the
2 greenhouse gases emission performance standard shall begin
3 immediately upon the establishment of the standard. All
4 combined-cycle natural gas powerplants that are in operation, or
5 that have an Energy Commission final permit decision to operate
6 as of June 30, 2007, shall be deemed to be in compliance with the
7 greenhouse gases emission performance standard.

8 (2) The greenhouse gases emission performance standard shall
9 be adopted by regulation pursuant to the Administrative Procedure
10 Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of
11 Division 3 of Title 2 of the Government Code).

12 (3) In determining the rate of emissions of greenhouse gases
13 for baseload generation, the Energy Commission shall include the
14 net emissions resulting from the production of electricity by the
15 baseload generation.

16 (4) The Energy Commission shall establish an output-based
17 methodology to ensure that the calculation of emissions of
18 greenhouse gases for cogeneration recognizes the total usable
19 energy output of the process, and includes all greenhouse gases
20 emitted by the facility in the production of both electrical and
21 thermal energy.

22 (5) In calculating the emissions of greenhouse gases by facilities
23 generating electricity from biomass, biogas, or landfill gas energy,
24 the Energy Commission shall consider net emissions from the
25 process of growing, processing, and generating the electricity from
26 the fuel source.

27 (6) Carbon dioxide that is captured from the emissions of a
28 powerplant and that is permanently disposed of in geological
29 formations in compliance with applicable laws and regulations,
30 shall not be counted as emissions from the powerplant.

31 (7) In adopting and implementing the greenhouse gases emission
32 performance standard, the Energy Commission, in consultation
33 with the Independent System Operator, shall consider the effects
34 of the standard on system reliability and overall costs to electricity
35 customers.

36 (8) In developing and implementing the greenhouse gases
37 emission performance standard, the Energy Commission shall
38 address long-term purchases of electricity from unspecified sources
39 in a manner consistent with this chapter.

(9) In developing and implementing the greenhouse gases emission performance standard, the Energy Commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.

(f) The Energy Commission, in a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned electric utilities.

(g) The commission, through a rulemaking proceeding and in consultation with the Energy Commission and the State Air Resources Board, shall reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to load-serving entities.

(h) This section shall become inoperative on July 1, 2017, and, as of January 1, 2018, is repealed.

SEC. 6. Section 8341 is added to the Public Utilities Code, to read:

8341. (a) (1) Beginning July 1, 2017, no load-serving entity or local publicly owned electric utility may enter into a new long-term financial commitment unless any ~~primary~~ *nonpeaking* generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission, pursuant to subdivision (d), for a load-serving entity, or by the Energy Commission, pursuant to subdivision (f), for a local publicly owned electric utility.

(2) Beginning July 1, 2017, no load-serving entity or local publicly owned electric utility may enter into a new long-term financial commitment unless any ~~secondary~~ *peaking* generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission, pursuant to subdivision (e), for a load-serving entity, or by the Energy Commission, pursuant to subdivision (g), for a local publicly owned electric utility.

(3) Neither the commission ~~or~~ *nor* the Energy Commission shall establish a greenhouse gases emission performance standard for exempt generation.

1 (b) (1) (A) The commission shall not approve a long-term
2 financial commitment by an electrical corporation unless the
3 ~~primary nonpeaking~~ generation supplied under the long-term
4 financial commitment complies with the greenhouse gases emission
5 performance standard established by the commission pursuant to
6 subdivision (d).

7 (B) The commission shall not approve a long-term financial
8 commitment by an electrical corporation unless the ~~secondary~~
9 ~~peaking~~ generation supplied under the long-term financial
10 commitment complies with the greenhouse gases emission
11 performance standard established by the commission pursuant to
12 subdivision (e).

13 (2) The commission may, in order to enforce this section, review
14 any long-term financial commitment proposed to be entered into
15 by an electric service provider or a community choice aggregator.

16 (3) The commission shall adopt rules to enforce the requirements
17 of this section, for load-serving entities. The commission shall
18 adopt procedures, for all load-serving entities, to verify the
19 emissions of greenhouse gases from any ~~primary nonpeaking~~
20 generation or ~~secondary peaking~~ generation supplied under a
21 contract subject to the greenhouse gases emission performance
22 standard to ensure compliance with the standard.

23 (4) In determining whether a long-term financial commitment
24 is for ~~primary nonpeaking~~ generation or ~~secondary peaking~~
25 generation, the commission shall consider the design of the
26 powerplant and the intended use of the powerplant, as determined
27 by the commission based upon the electricity purchase contract,
28 any certification received from the Energy Commission, any other
29 permit or certificate necessary for the operation of the powerplant,
30 including a certificate of public convenience and necessity, any
31 procurement approval decision for the load-serving entity, and any
32 other matter the commission determines is relevant under the
33 circumstances.

34 (5) Costs incurred by an electrical corporation to comply with
35 this section, including those costs incurred for electricity purchase
36 agreements that are approved by the commission that comply with
37 the respective greenhouse gases emission performance standards,
38 are to be treated as procurement costs incurred pursuant to an
39 approved procurement plan and the commission shall ensure timely

1 cost recovery of those costs pursuant to paragraph (3) of
2 subdivision (d) of Section 454.5.

3 (6) A long-term financial commitment entered into through a
4 contract approved by the commission, for electricity generated by
5 a zero- or low-carbon generating resource that is contracted for,
6 on behalf of consumers of this state on a cost-of-service basis,
7 shall be recoverable in rates, in a manner determined by the
8 commission consistent with Section 380. The commission may,
9 after a hearing, approve an increase from one-half to 1 percent in
10 the return on investment by the third party entering into the contract
11 with an electrical corporation with respect to investment in zero-
12 or low-carbon generation resources authorized pursuant to this
13 paragraph.

14 (c) (1) The Energy Commission shall adopt regulations for the
15 enforcement of this chapter with respect to a local publicly owned
16 electric utility.

17 (2) The Energy Commission may, in order to ensure compliance
18 with the greenhouse gases emission performance standard by local
19 publicly owned electric utilities, apply the procedures adopted by
20 the commission to verify the emissions of greenhouse gases from
21 ~~primary nonpeaking~~ generation and ~~secondary peaking~~ generation
22 pursuant to subdivision (b).

23 (3) In determining whether a long-term financial commitment
24 is for ~~primary nonpeaking~~ generation or ~~secondary peaking~~
25 generation, the Energy Commission shall consider the design of
26 the powerplant and the intended use of the powerplant, as
27 determined by the Energy Commission based upon the electricity
28 purchase contract, any certification received from the Energy
29 Commission, any other permit for the operation of the powerplant,
30 any procurement approval decision for the load-serving entity, and
31 any other matter the Energy Commission determines is relevant
32 under the circumstances.

33 (d) (1) On or before June 30, 2017, the commission, through a
34 rulemaking proceeding, and in consultation with the Energy
35 Commission and the State Air Resources Board, shall establish a
36 greenhouse gases emission performance standard for all ~~primary~~
37 ~~nonpeaking~~ generation of load-serving entities. The greenhouse
38 gases emission performance standard for ~~primary nonpeaking~~
39 generation shall be established at the lowest level that the
40 commission determines to be technologically feasible without

1 putting reliability of the electrical grid and of electric service at
2 risk. ~~The initial greenhouse gases emission performance standard~~
3 ~~for primary generation shall establish a rate of emissions of~~
4 ~~greenhouse gases that is 80 percent lower than the permissible rate~~
5 ~~of emissions of greenhouse gases for baseload generation in effect~~
6 ~~as of January 1, 2015. The commission, in consultation with the~~
7 ~~Energy Commission and the State Air Resources Board, shall~~
8 ~~update the greenhouse gases emission performance standard for~~
9 ~~primary generation every five years based on new technology.~~
10 Enforcement of the greenhouse gases emission performance
11 standard for ~~primary~~ *nonpeaking* generation shall begin on July
12 1, 2017. *The commission, in consultation with the Energy*
13 *Commission and the State Air Resources Board, shall update the*
14 *greenhouse gases emission performance standard for nonpeaking*
15 *generation every five years based on new technology. The*
16 *greenhouse gases emission performance standard for nonpeaking*
17 *generation that will take effect on July 1, 2027, shall establish a*
18 *rate of emissions of greenhouse gases that is 80 percent lower*
19 *than the permissible rate of emissions of greenhouse gases for*
20 *baseload generation in effect as of January 1, 2015.*

21 (2) In determining the rate of emissions of greenhouse gases
22 for ~~primary~~ *nonpeaking* generation, the commission shall include
23 the net emissions resulting from the production of electricity by
24 the ~~primary~~ *nonpeaking* generation.

25 (3) The commission shall establish an output-based methodology
26 to ensure that the calculation of emissions of greenhouse gases for
27 cogeneration recognizes the total usable energy output of the
28 process, and includes all greenhouse gases emitted by the facility
29 in the production of both electricity and thermal energy.

30 (4) In calculating the emissions of greenhouse gases by facilities
31 generating electricity from biomass, biogas, or landfill gas energy,
32 the commission shall consider net emissions from the process of
33 growing, processing, and generating the electricity from the fuel
34 source.

35 (5) Greenhouse gases that are ~~injected in geological formations,~~
36 ~~so as to prevent releases prevented from being released~~ into the
37 ~~atmosphere, commonly termed~~ *atmosphere as a result of* carbon
38 capture and storage or carbon capture and sequestration, in
39 compliance with applicable laws and regulations, shall not be
40 counted as emissions of the powerplant in determining compliance

1 with the greenhouse gases—~~emissions~~ *emission* performance
2 standard for ~~primary nonpeaking~~ generation.

3 (6) In adopting and implementing the greenhouse gases emission
4 performance standard for ~~primary nonpeaking~~ generation, the
5 commission, in consultation with the Independent System Operator,
6 shall consider the effects of the standard on system reliability and
7 overall costs to electricity customers.

8 (7) In developing and implementing the greenhouse gases
9 emission performance standard for ~~primary nonpeaking~~ generation,
10 the commission shall address long-term purchases of electricity
11 from unspecified sources in a manner consistent with this chapter.

12 (8) In developing and implementing the greenhouse gases
13 emission performance standard for ~~primary nonpeaking~~ generation,
14 the commission shall consider and act in a manner consistent with
15 any rules adopted pursuant to Section 824a-3 of Title 16 of the
16 United States Code.

17 (9) An electrical corporation that provides electric service to
18 75,000 or fewer retail end-use customers in California may file
19 with the commission a proposal for alternative compliance with
20 this subdivision, which the commission may accept upon a showing
21 by the electrical corporation of both of the following:

22 (A) A majority of the electrical corporation's retail end-use
23 customers for electric service are located outside of California.

24 (B) The emissions of greenhouse gases to generate electricity
25 for the retail end-use customers of the electrical corporation are
26 subject to a review by the utility regulatory commission of at least
27 one other state in which the electrical corporation provides
28 regulated retail electric service.

29 (e) (1) On or before June 30, 2017, the commission, through a
30 rulemaking proceeding, and in consultation with the Energy
31 Commission and the State Air Resources Board, shall establish a
32 greenhouse gases emission performance standard for all ~~secondary~~
33 *peaking* generation of load-serving entities. The greenhouse gases
34 emission performance standard for ~~secondary peaking~~ generation
35 shall be established at the lowest level that the commission
36 determines to be technologically feasible without putting reliability
37 of the electrical grid and of electric service at risk. ~~The commission,~~
38 ~~in consultation with the Energy Commission and the State Air~~
39 ~~Resources Board, shall update the greenhouse gases emission~~
40 ~~performance standard for secondary generation every five years~~

~~based on new technology.~~ Enforcement of the greenhouse gases emission performance standard for ~~secondary peaking~~ generation shall begin on July 1, 2017. *The commission, in consultation with the Energy Commission and the State Air Resources Board, shall update the greenhouse gases emission performance standard for peaking generation every five years based on new technology.*

(2) In determining the rate of emissions of greenhouse gases for ~~secondary peaking~~ generation, the commission shall include the net emissions resulting from the production of electricity by the ~~secondary peaking~~ generation.

(3) The commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electrical and thermal energy.

(4) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source.

(5) Greenhouse gases that are ~~injected in geological formations, so as to prevent releases prevented from being released into the atmosphere, commonly termed atmosphere as a result of~~ carbon capture and storage or carbon capture and sequestration, in compliance with applicable laws and regulations, shall not be counted as emissions of the powerplant in determining compliance with the greenhouse gases ~~emissions~~ *emission* performance standard for ~~secondary peaking~~ generation.

(6) In adopting and implementing the greenhouse gases emission performance standard for ~~secondary peaking~~ generation, the commission, in consultation with the Independent System Operator, shall consider the effects of the standard on system reliability and overall costs to electricity customers.

(7) In developing and implementing the greenhouse gases emission performance standard for ~~secondary peaking~~ generation, the commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.

(8) In developing and implementing the greenhouse gases emission performance standard for ~~secondary peaking~~ generation, the commission shall consider and act in a manner consistent with

1 any rules adopted pursuant to Section 824a-3 of Title 16 of the
2 United States Code.

3 (9) An electrical corporation that provides electric service to
4 75,000 or fewer retail end-use customers in California may file
5 with the commission a proposal for alternative compliance with
6 this subdivision, which the commission may accept upon a showing
7 by the electrical corporation of both of the following:

8 (A) A majority of the electrical corporation's retail end-use
9 customers for electric service are located outside of California.

10 (B) The emissions of greenhouse gases to generate electricity
11 for the retail end-use customers of the electrical corporation are
12 subject to a review by the utility regulatory commission of at least
13 one other state in which the electrical corporation provides
14 regulated retail electric service.

15 (f) (1) On or before June 30, 2017, the Energy Commission, at
16 a duly noticed public hearing and in consultation with the
17 commission and the State Air Resources Board, shall establish a
18 greenhouse gases emission performance standard for all ~~primary~~
19 *nonpeaking* generation of local publicly owned electric utilities.
20 The greenhouse gases emission performance standard for ~~primary~~
21 *nonpeaking* generation shall be established at the lowest level that
22 the Energy Commission determines to be technologically feasible
23 without putting reliability of the electrical grid and of electric
24 service at risk. ~~The initial greenhouse gases emission performance~~
25 ~~standard for primary generation shall establish a rate of emissions~~
26 ~~of greenhouse gases that is 80 percent lower than the permissible~~
27 ~~rate of emissions of greenhouse gases for baseload generation in~~
28 ~~effect as of January 1, 2015. The Energy Commission, in~~
29 ~~consultation with the commission and the State Air Resources~~
30 ~~Board, shall update the greenhouse gases emission performance~~
31 ~~standard for primary generation every five years based on new~~
32 ~~technology. The greenhouse gases emission performance standard~~
33 ~~for primary nonpeaking generation established by the Energy~~
34 ~~Commission for local publicly owned electric utilities shall be~~
35 ~~consistent with the standard adopted by the commission for~~
36 ~~load-serving entities. Enforcement of the greenhouse gases~~
37 ~~emission performance standard for primary nonpeaking generation~~
38 ~~shall begin on July 1, 2017. The Energy Commission, in~~
39 ~~consultation with the commission and the State Air Resources~~
40 ~~Board, shall update the greenhouse gases emission performance~~

1 *standard for nonpeaking generation every five years based on new*
2 *technology. The greenhouse gases emission performance standard*
3 *for nonpeaking generation that will take effect on July 1, 2027,*
4 *shall establish a rate of emissions of greenhouse gases that is 80*
5 *percent lower than the permissible rate of emissions of greenhouse*
6 *gases for baseload generation in effect as of January 1, 2015.*

7 (2) The greenhouse gases emission performance standard for
8 ~~primary nonpeaking~~ generation shall be adopted by regulation
9 pursuant to the Administrative Procedure Act (Chapter 3.5
10 (commencing with Section 11340) of Part 1 of Division 3 of Title
11 2 of the Government Code).

12 (3) In determining the rate of emissions of greenhouse gases
13 for ~~primary nonpeaking~~ generation, the Energy Commission shall
14 include the net emissions resulting from the production of
15 electricity by the ~~primary nonpeaking~~ generation.

16 (4) The Energy Commission shall establish an output-based
17 methodology to ensure that the calculation of emissions of
18 greenhouse gases for cogeneration recognizes the total usable
19 energy output of the process, and includes all greenhouse gases
20 emitted by the facility in the production of both electricity and
21 thermal energy.

22 (5) In calculating the emissions of greenhouse gases by facilities
23 generating electricity from biomass, biogas, or landfill gas energy,
24 the commission shall consider net emissions from the process of
25 growing, processing, and generating the electricity from the fuel
26 source.

27 (6) Greenhouse gases that are ~~injected in geological formations,~~
28 ~~so as to prevent releases prevented from being released into the~~
29 ~~atmosphere, commonly termed atmosphere as a result of carbon~~
30 ~~capture and storage or carbon capture and sequestration, in~~
31 ~~compliance with applicable laws and regulations, shall not be~~
32 ~~counted as emissions of the powerplant in determining compliance~~
33 ~~with the greenhouse gases—emissions emission performance~~
34 ~~standard for primary nonpeaking generation.~~

35 (7) In adopting and implementing the greenhouse gases emission
36 performance standard for ~~primary nonpeaking~~ generation, the
37 Energy Commission, in consultation with the Independent System
38 Operator, shall consider the effects of the standard on system
39 reliability and overall costs to electricity customers.

1 (8) In developing and implementing the greenhouse gases
2 emission performance standard for ~~primary nonpeaking~~ generation,
3 the commission shall address long-term purchases of electricity
4 from unspecified sources in a manner consistent with this chapter.

5 (9) In developing and implementing the greenhouse gases
6 emission performance standard for ~~primary nonpeaking~~ generation,
7 the Energy Commission shall consider and act in a manner
8 consistent with any rules adopted pursuant to Section 824a-3 of
9 Title 16 of the United States Code.

10 (g) (1) On or before June 30, 2017, the Energy Commission,
11 through a rulemaking proceeding, and in consultation with the
12 commission and the State Air Resources Board, shall establish a
13 greenhouse gases emission performance standard for all ~~secondary~~
14 *peaking* generation of load-serving entities. The greenhouse gases
15 emission performance standard for ~~secondary peaking~~ generation
16 shall be established at the lowest level that the Energy Commission
17 determines to be technologically feasible without putting reliability
18 of the electrical grid and of electric service at risk. ~~The Energy~~
19 ~~Commission, in consultation with the commission and the State~~
20 ~~Air Resources Board, shall update the greenhouse gases emission~~
21 ~~performance standard for secondary generation every five years~~
22 ~~based on new technology.~~ The greenhouse gases emission
23 performance standard for ~~secondary peaking~~ generation established
24 by the Energy Commission for local publicly owned electric
25 utilities shall be consistent with the standard adopted by the
26 commission for load-serving entities. Enforcement of the
27 greenhouse gases emission performance standard for ~~secondary~~
28 *peaking* generation shall begin on July 1, 2017. *The Energy*
29 *Commission, in consultation with the commission and the State*
30 *Air Resources Board, shall update the greenhouse gases emission*
31 *performance standard for peaking generation every five years*
32 *based on new technology.*

33 (2) The greenhouse gases emission performance standard for
34 ~~secondary peaking~~ generation shall be adopted by regulation
35 pursuant to the Administrative Procedure Act (Chapter 3.5
36 (commencing with Section 11340) of Part 1 of Division 3 of Title
37 2 of the Government Code).

38 (3) In determining the rate of emissions of greenhouse gases
39 for ~~secondary peaking~~ generation, the Energy Commission shall

1 include the net emissions resulting from the production of
2 electricity by the ~~secondary~~ *peaking* generation.

3 (4) The Energy Commission shall establish an output-based
4 methodology to ensure that the calculation of emissions of
5 greenhouse gases for cogeneration recognizes the total usable
6 energy output of the process, and includes all greenhouse gases
7 emitted by the facility in the production of both electricity and
8 thermal energy.

9 (5) In calculating the emissions of greenhouse gases by facilities
10 generating electricity from biomass, biogas, or landfill gas energy,
11 the Energy Commission shall consider net emissions from the
12 process of growing, processing, and generating the electricity from
13 the fuel source.

14 (6) Greenhouse gases that are ~~injected in geological formations,~~
15 ~~so as to prevent releases~~ *prevented from being released* into the
16 ~~atmosphere, commonly termed~~ *atmosphere as a result of* carbon
17 capture and storage or carbon capture and sequestration, in
18 compliance with applicable laws and regulations, shall not be
19 counted as emissions of the powerplant in determining compliance
20 with the greenhouse gases ~~emissions~~ *emission* performance
21 standard for ~~secondary~~ *peaking* generation.

22 (7) In adopting and implementing the greenhouse gases emission
23 performance standard for ~~secondary~~ *peaking* generation, the Energy
24 Commission, in consultation with the Independent System
25 Operator, shall consider the effects of the standard on system
26 reliability and overall costs to electricity customers.

27 (8) In developing and implementing the greenhouse gases
28 emission performance standard for ~~secondary~~ *peaking* generation,
29 the Energy Commission shall address long-term purchases of
30 electricity from unspecified sources in a manner consistent with
31 this chapter.

32 (9) In developing and implementing the greenhouse gases
33 emission performance standard for ~~secondary~~ *peaking* generation,
34 the Energy Commission shall consider and act in a manner
35 consistent with any rules adopted pursuant to Section 824a-3 of
36 Title 16 of the United States Code.

37 (h) (1) *It is the intent of the Legislature that the greenhouse*
38 *gases emission performance standard operate in a prospective*
39 *manner.*

1 (2) (A) *A nonpeaking powerplant that has all necessary permits*
2 *or certificates to operate at the time it commences operation may*
3 *continue to operate and provide nonpeaking generation for its*
4 *anticipated useful life and need not comply with a greenhouse*
5 *gases emission performance standard adopted after it commences*
6 *operation.*

7 (B) *A nonpeaking powerplant that meets the applicable*
8 *greenhouse gases emission performance standard at the time it*
9 *commences operation may continue to operate and provide*
10 *nonpeaking generation for its anticipated useful life and need not*
11 *comply with a more stringent greenhouse gases emission*
12 *performance standard adopted after it commences operation.*

13 (3) (A) *A peaking powerplant that has all necessary permits or*
14 *certificates to operate at the time it commences operation may*
15 *continue to operate and provide peaking generation for its*
16 *anticipated useful life and need not comply with a greenhouse*
17 *gases emission performance standard adopted after it commences*
18 *operation.*

19 (B) *A peaking powerplant that meets the applicable greenhouse*
20 *gases emission performance standard at the time it commences*
21 *operation may continue to operate and provide peaking generation*
22 *for its anticipated useful life and need not comply with a more*
23 *stringent greenhouse gases emission performance standard adopted*
24 *after it commences operation.*

25 (4) (A) *The commission shall determine the anticipated useful*
26 *life of a nonpeaking or peaking powerplant and when that*
27 *powerplant commences or commenced operation for a load-serving*
28 *entity.*

29 (B) *The Energy Commission shall determine the anticipated*
30 *useful life of a nonpeaking or peaking powerplant and when that*
31 *powerplant commences or commenced operation for a local*
32 *publicly owned electric utility.*

33 ~~(h)~~

34 (i) *This section shall become operative on January 1, 2017.*

35 SEC. 7. *No reimbursement is required by this act pursuant to*
36 *Section 6 of Article XIII B of the California Constitution because*
37 *the only costs that may be incurred by a local agency or school*
38 *district will be incurred because this act creates a new crime or*
39 *infraction, eliminates a crime or infraction, or changes the penalty*
40 *for a crime or infraction, within the meaning of Section 17556 of*

- 1 the Government Code, or changes the definition of a crime within
- 2 the meaning of Section 6 of Article XIII B of the California
- 3 Constitution.

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